

U.S.S.N. 09/235,875

Filed: January 22, 1999

AMENDMENT AND RESPONSE TO OFFICE ACTION

Amendment

In the Specification

Please replace the paragraph bridging pages 21 and 22 with the following paragraph.

Plasmid pMBXc12J12 was constructed by inserting the 2.4 Kb ApoI fragment containing the *A. caviae* ~~PHB~~ polymerase PHA synthase gene (*phaC*) (Fukui & Doi, *J. Bacteriol.* 179: 4821-30 (1997)) into the EcoRI site of pUC18. Plasmid pSU18-AB1 contains the *R. eutropha* *phbAB* genes under the control of an IPTG-inducible promoter in the vector pSU18 (Martinez et. al., *Gene* 66: 1659-20 (1988)). PHBH was produced from glucose and butyrate in *E. coli* MBX1325 (identical to strain DC679, *mel*, *fadR*, *atoC* (*con*) *adhC81* (Clark & Rod, *J. Mol. Biol. Evol.* 25: 151 (1987)) containing plasmids pMBXC12J12 and pSU18-AB1 as follows. The transformed cells (1L) were grown in LB containing 20 mM butyrate for 24 hours at 30 °C and harvested by centrifugation. The PHA polymer was purified from lyophilized cells by extraction with chloroform for 16 hours and the PHA precipitated in a 5- to 10-fold excess of methanol. The precipitated polymer was analyzed by gas chromatography and identified as PHBH copolymer containing 1.0 %HH comonomer.

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